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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,518	09/29/2003	Yoshihisa Suda	053466-0369	9110

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EXAMINER

DUNWIDDIE, MEGHAN K

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/671,518	SUDA ET AL.	
	Examiner	Art Unit	
	Meghan K. Dunwiddie	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is a Non-Final Rejection in response to the amendment filed on October 11, 2005 by **Suda et al.**

Response to Arguments

1. Applicant's arguments, see page 3, filed October 11, 2005, with respect to the rejection(s) of claim(s) 1-4 under **Runfol** et al. (US 6601983) and **Konishi et al.** (US 2002/0096984) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Warhus, Jr. et al. (US 1925423) and **Konishi et al.** (US 2002/0096984).

Claim Objections

2. Claim 2 is objected to because of the following informalities: the term "heating" is misspelled in line 2 of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Warhus, Jr. et al.** (US 1925423) in view of **Konishi et al.** (US 2002/0096984).

5. Regarding claim 1, **Warhus, Jr. et al.** shows a vehicle lamp [See Figure 2] comprising:

- A lamp body for holding therein a light source [See Figure 2];
- A lens [Figure 2: (7)] mounted on the front of said lamp body [See Figure 2];
- And a heating element [Figure 5: (16)] mounted within said lamp body and apart from said light source and said lens [See Figures 4 and 5], wherein heat rays radiated from said heating element [Figure 5: (16)] irradiate a rear surface of said lens [Figure 5: (7')].

6. **Warhus, Jr. et al.** does not show:

- A carbon-based heating element.

7. **Konishi et al.** teaches:

- A carbon-based heating element [Figure 1: (1)].

8. It would have been obvious for one of ordinary skill in the art, at the time of the invention to use the carbon-based heating element as taught by **Konishi et al.** within the lamp body of **Warhus, Jr. et al.** for the purpose and advantage of providing a means of heating the lens of the lamp body.

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9. Regarding claim 2, **Warhus, Jr.** et al. shows:

- A heating element [Figure 5: (16)].

10. **Warhus, Jr.** et al. does not show:

- A glass tube for sealing therein said carbon-based heating element.

11. **Konishi** et al. teaches:

- A glass tube [Figure 1: (2)] for sealing therein said carbon-based heating element [Figure 1: (1)].

12. It would have been obvious for one of ordinary skill in the art, at the time of the invention to seal the heating element of **Warhus, Jr.** et al. within a glass tube of **Konishi** et al. for the purpose and advantage of protecting the heating element from hanging down or oxidation at high temperatures.

13. Regarding claim 3, **Warhus, Jr.** et al. shows:

- A heating element [Figure 5: (16)].

14. **Warhus, Jr.** et al. does not show:

- Said carbon-based heating element contains amorphous carbon and carbon powder dispersed in said amorphous carbon.

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15. **Konishi et al.** teaches:

- Said carbon-based heating element [Figure 1: (1)] contains amorphous carbon and carbon powder dispersed in said amorphous carbon [See page 4 paragraph [0042] lines 2-6].

16. It would have been obvious for one of ordinary skill in the art, at the time of the invention to utilize amorphous carbon as taught in **Konishi et al.** within the heating element of **Warhus, Jr. et al.** for the purpose and advantage of constructing an element closely comparable to pure carbon material and resulting in high radiation efficiency.

17. Regarding claim 4, **Warhus, Jr. et al.** shows:

- A heating element [Figure 5: (16)].

18. **Warhus, Jr. et al.** does not show:

- Said carbon-based heating element further contains a metal or metalloid compound.

19. **Konishi et al.** teaches:

- Said carbon-based heating element [Figure 1: (1)] further contains a metal or metalloid compound [See page 1 paragraph [0005] lines 3-7].

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20. It would have been obvious for one of ordinary skill in the art, at the time of the invention to create a mixture of an amorphous carbon composition and a metal or metalloid compound as taught in **Konishi et al.** to be contained within the heating element of **Warhus, Jr. et al.** for the purpose and advantage of producing an element with resistances larger than that of pure carbon by several times.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571) 272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Stephen Husar
Primary Examiner